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REMARKS

Claims 1, 2 and 5-9 are pending in the application.

Claims 6 and 7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.

Claims 1-2, 5 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cedrone et al. (US 6,538,987, "Cedrone") in view of Calvignac et al. (US 6,044,079, "Calvignac").

Each of the various rejections and objections are overcome by amendments that are made to the specification, drawing, and/or claims, as well as, or in the alternative, by various arguments that are presented.

Entry of this Amendment is proper under 37 CFR 1.116 since the amendment: (a) places the application in condition for allowance for the reasons discussed herein; (b) does not raise any new issue requiring further search and/or consideration since the amendments amplify issues previously discussed throughout prosecution; (c) satisfies a requirement of form asserted in the previous Office Action; (d) does not present any additional claims without canceling a corresponding number of finally rejected claims; or (e) places the application in better form for appeal, should an appeal be necessary. The amendment is necessary and was not earlier presented because it is made in response to arguments raised in the final rejection. Entry of the amendment is thus respectfully requested.

Any amendments to any claim for reasons other than as expressly recited herein as being for the purpose of distinguishing such claim from known prior art are not being made with an intent to change in any way the literal scope of such claims or the range of equivalents for such claims. They are being made simply to present language that is better in conformance with the form requirements of Title 35 of the United States Code or is simply clearer and easier to understand than the originally presented language. Any amendments to any claim expressly made in order to distinguish such claim from known prior art are being made only with an intent to change the literal scope of such claim in the most minimal way, i.e., to just avoid the prior art in a way that leaves the claim novel and not obvious in view of the cited prior art, and no equivalent of any subject matter remaining in the claim is intended to be surrendered.

Also, since a dependent claim inherently includes the recitations of the claim or chain of claims from which it depends, it is submitted that the scope and content of any dependent claims

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that have been herein rewritten in independent form is exactly the same as the scope and content of those claims prior to having been rewritten in independent form. That is, although by convention such rewritten claims are labeled herein as having been "amended," it is submitted that only the format, and not the content, of these claims has been changed. This is true whether a dependent claim has been rewritten to expressly include the limitations of those claims on which it formerly depended or whether an independent claim has been rewriting to include the limitations of claims that previously depended from it. Thus, by such rewriting no equivalent of any subject matter of the original dependent claim is intended to be surrendered. If the Examiner is of a different view, he is respectfully requested to so indicate.

Rejection Under 35 U.S.C. 112, First Paragraph

Claims 6 and 7 are rejected under 35 U.S.C. 112, ¶1, as failing to comply with the enablement requirement. This ground of rejection is respectfully traversed.

With respect to claim 6, the Examiner asserts that the limitation "any value of the pointer field other than zero constitutes a valid index into the groups table" does not meet the enablement requirement "because any value of the pointer field other than zero allows for the groups table to be of an infinite size...." With respect to claim 7, claim 7 is rejected as being dependent upon claim 6. Applicant respectfully disagrees.

Applicant has herein cancelled claim 6, and amended claim 7 to depend from claim 1. As such, Applicant submits that the Examiner's objection should be withdrawn.

Rejection Under 35 U.S.C. 103(a)

Claims 1-2, 5 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cedrone et al. (US 6,538,987, "Cedrone") in view of Calvignac et al. (US 6,044,079, "Calvignac").

Applicant's invention teaches a method for supporting virtual path/virtual channel (VP/VC) groups in asynchronous transfer mode (ATM) switching systems that implement ATM automatic protection switching (APS) in which traffic flows from a source on two paths and a destination selects traffic from only one of the paths at a time for further processing. Applicant's invention discloses "creating a groups table, the groups table having an entry for each of the two paths of every active VP/VC group, each active VP/VC group having an associated set of

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member circuits, each entry indicating whether the cells for that path of that VP/VC group should be forwarded or discarded, each entry referenced by means of a pointer field," as disclosed in Applicant's claim 1.

In support of at least Applicant's claim 1, Applicant's specification states: "[i]n order to support VP/VC groups efficiently, it is desirable that whenever the forward/discard status of a group changes, that that change be reflected in a single entry and not in the entry of every member circuit. This is achieved by creating a groups table that has two entries for every active group, one for each of the two instances of that group's member set." (Applicant's Specification, Pg. 5, Lines 2-7, Emphasis added). In other words, Applicant's invention is clearly directed toward supporting virtual path/virtual channel (VP/VC) groups in asynchronous transfer mode (ATM) switching systems.

By contrast, Cedrone generally teaches a switch including a primary set of routing tables that contains the routing information for every virtual circuit over a primary ring and a secondary set of routing tables that contains the routing information for every virtual circuit over a secondary ring. Cedrone is completely devoid of any teaching or suggestion of VP groups or VC groups. In other words, Cedrone fails to teach or suggest VP/VC groups having associated sets of member circuits. Rather, Cedrone merely teaches that VPI key and VCI key information is maintained for every virtual circuit. Cedrone is completely devoid of any teaching or suggestion of any grouping of VP/VC member circuits. Thus, since Cedrone fails to teach or suggest any VP/VC groups, Cedrone must also fail to teach or suggest creating a groups table having an entry for each of the two paths of every active VP/VC group, as taught in Applicants' invention of claim 1.

Furthermore, Calvignac generally teaches a switch including a virtual channel connection hash table including a number of table addresses where each table address stores a record for incoming data cells of a frame. The records indicate whether data cells of the frame are to be discarded. Specifically, Calvignac teaches that the packet discard field "indicates whether data cells of a data frame, belonging to a VCC, are to be discarded." (Calvignac, Col. 9, Lines 17-18, Emphasis added). In other words, Calvignac fails to teach or suggest VP/VC groups having associated sets of member circuits. Rather, Calvignac merely teaches that discard status is maintained for each individual circuit. Calvignac is completely devoid of any teaching or suggestion of any grouping of VP/VC member circuits. Thus, since Cedrone fails to teach or

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suggest any VP/VC groups, Cedrone must also fail to teach or suggest creating a groups table having an entry for each of the two paths of every active VP/VC group, as taught in Applicants' invention of claim 1.

As such, since both Cedrone and Calvignac fail to teach or suggest VP/VC groups, no conceivable combination of Cedrone and Calvignac, assuming that Cedrone and Calvignac could even be operable combined (which Applicant maintains they cannot), can teach or suggest VP/VC groups, much less creating a groups table having an entry for each of the two paths of every active VP/VC group, as taught in Applicants' invention of claim 1. Thus, independent claim 1 is allowable over the proposed combination of Cedrone and Calvignac under 35 U.S.C. 103.

Furthermore, even if the Office Action did establish that each of the elements recited in Applicant's rejected claims exist in the references (which Applicant maintains it did not), to combine them into a working system, even if possible, is no trivial matter that could be said to be "obvious". This is especially true when the single table taught in Calvignac is a VCC hash table which may only be accessed by determining a table key using a hash formula, and determining whether the table key falls within the range of table indexes in the VCC hash table. By contrast, each of the primary and secondary tables taught in Cedrone are indexed using VPI/VCI values. As such, modification of the VCC hash table of Calvignac for use in the switch of Cedrone which uses VPI/VCI values to access key values indicative of discard status, is no trivial matter that could be said to be "obvious".

There must be a suggestion in the art to combine actual physical elements, or method steps, in the same way as Applicant's claim does to make an actual working system. Otherwise, the proposed combination is merely wishful thinking that was developed using improper hindsight. Here there is no such suggestion as to how the disparate elements of the various references could actually be combined into a single practical system.

Moreover, even if Cedrone could be modified using Calvignac to include a single table for the primary and secondary rings (which Applicant maintains it cannot), Cedrone would merely teach a switch including a pair of table entries, one primary and one secondary, for each circuit. Each entry of the table in such a switch would still include a VPI value and a VCI value uniquely identifying one circuit. As such, the single table of such a modified switch would still

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fail to teach or suggest a groups table having an entry for each of the two paths of every active VP/VC group, each active VP/VC group having a set of member circuits.

Thus, independent claim 1 is allowable over the proposed combination of Cedrone and Calvignac under 35 U.S.C. 103.

Since claims 2, 5, and 8-9 depend directly or indirectly from claim 1, and include all the limitations thereof, they too are allowable over the proposed combination of Cedrone and Calvignac under 35 U.S.C. 103.

Therefore, the Examiner's rejection should be withdrawn.

Secondary References

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to Applicant's disclosure than the primary references cited in the Office Action. Therefore, Applicant believes that a detailed discussion of the secondary references is not necessary for a full and complete response to this Office Action.

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Conclusion

It is respectfully submitted that the Office Action's rejections have been overcome and that this application is now in condition for allowance. Reconsideration and allowance are, therefore, respectfully solicited.

If, however, the Examiner still believes that there are unresolved issues, he is invited to call applicant's attorneys Michael Bentley at 732-383-1434 or Eamon J. Wall at 732-530-9404 so that arrangements may be made to discuss and resolve any such issues.

Respectfully submitted,

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